

**MAGNETIC STORM SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS
(PRELIMINARY REPORT ON RAPID MAGNETIC VARIATIONS)**

December 2002

Storm Sudden Commencements (SSC)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
22	1029	B: VAL*	16	1111-1130	BDV
		C: NGK* BDV* SPT*	18	1355-1407	VAL
22	1302	A: COI			
		B: NUR* SPT*			
		C: NGK* LIV			

REPORTING OBSERVATORIES (up to the 4th of February 2003):

SOD NUR NGK VAL BDV CLF HRB NAG GCK MMB EBR COI SPT KAK KNY GUI GNA CNB LIV

Three-letter codes identify each observatory. Reporting stations have been grouped by the character of the observed event. The letter A means very remarkable; B means fair, but unmistakable; C means very poor, doubtful; and - means no quality figure given. The * means that the SSC, at least in one component, was preceded by a small reversed impulse. SSCs are given only when five or more stations report the event. SFEs include all reports. If an SFE is confirmed by solar or ionospheric events, the name of the station is identified with a plus sign (+).

Note that we have included data of the Antarctic Station LIVINGSTONE (62° 39' 44" S, 60°23' 41" W) -- Luis F.